Catherine Hill Bay Dunecare and Landcare:

Planning Assessment Commission

June 14, 2012

Catherine Hill Bay Surf Club

Middle Camp Residential Development (Catherine Hill Bay) Concept Plan MP 10_0089 April 2012

HELP KEEP CATHO BEAUTIFUL:

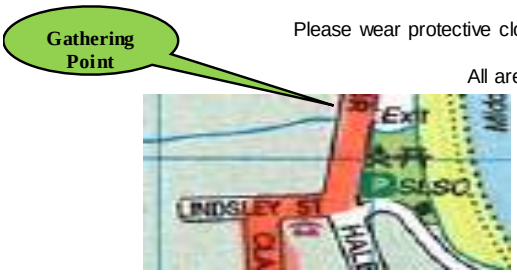
Our Dune Care group meets on the second Saturday of each month. It has a program for new plantings, cemetery protection, dune stabilisation and creek and wetland clean up. It can be fun and you make a real contribution to this special place, so join in.

We meet opposite the carpark on **Flowers Drive** Surf Club end of the Beach at 9:30 am. We remove weeds and plant around CHB Creek, the access paths to the beach, the Cemetery, the sand dunes on Graveyard Beach and the wetlands near Colliery Dr.

Please wear protective clothing – sun-smart, gloves; bring a drink and some tools eg secateurs, fork, pruners, lever.

All are welcome. It is only 2 hours out of the month and you can come for part or all of it. It is also a great opportunity to meet and mingle with old and new friends.

FOR FURTHER INFORMATION: David Knock 0413 712 712



1. The Ecological Assessment Report should be rejected.

Ref 6.3 Biodiversity: Page 36; An ecological assessment report (RPS Australia East Pty Ltd November 2010) was commissioned by Coal and Allied to support the concept plan.

CHBPA analysed the report and compared it to the report previously submitted by C&A in 2007. The two reports were around 99% identical so the information on which the current panel is relying is at least eight years old. Regeneration and the return of flora and fauna to the site in the eight years since the investigations were done have not been considered. Such old information is a poor basis on which to assess the proposal and previous decisions are not relevant to this changing environment.

The 2010 EAR is around 99% identical to the report submitted over three years earlier for a development proposal which was substantially different in its footprint from the current proposal. The EAR used information which was mostly at least 5 years old and had virtually no information about changes in the intervening three to eight years. As such it is outdated and should be rejected.

Apart from changes to one section – the background section on Page 1 of both the current assessment and the 2007 assessment – the entire EAR had only about 1% of its text figures and tables different from the 2007 report, which was for a different quantum of sites and included three significant portions which are not included in the current proposal. Therefore statements like

> *Seventeen native vegetation communities have been delineated and described for the Catherine Hill Bay site, including four listed EECs which collectively comprise approximately 5.5% of the study area (EAR page (ii):*

and

> *Weeds and Cleared Areas*
>
> *This vegetation community occurs within the central portion of the site and is the result of clearing for the underground mining operations, which were shut down in the 1960's. This community encompasses approximately 31.74ha of which 52% (16.35ha) occur within conservation lands under the proposal. (EAR page (v))*

are clearly inaccurate in that the overall area of the site is now markedly different and certain areas which contained EECs or weeds may or may not be in the current development. The minister could not use any such data to make a decision because its inaccuracies are numerous and critical to consideration of KTPs.

In addition, because this area is all naturally regenerating at a rapid pace, the three years or more since the data were collected for the 2007 report could have seen significant changes in factors such as koala sightings, feral cat and fox predation, bitou and lantana invasion and occurrence of threatened species such as tetratheca juncea plants. In relation to the latter, 8,042 were noted as present in the study area prior to 2007. That number of occurrences seen may have become quite inaccurate by 2010, up to four years after the survey, and now in 2012.

The literature review on Page 14 and subsequent pages states:

> *Notably several specific investigations into the existing environment within the vicinity of the site have been undertaken in recent times.*

This is identical to the statement made on page 14 of the 2007 EAR and the list which follows is absolutely identical in both reports. Again in the list at 3.1 Preliminary (Desktop) Assessments, all the references and processes are identical except for one change in which a date of website

access of May 2007 is changed to January 2010. In relation to fauna, apart from the very small surveys and single night survey done for the 2007 EAR, the most recent reference on fauna listed in the bibliography is 2001. Either no relevant work at all has been done in the years since, or the company providing the report has made no attempt to update using all available information.

We give an example from the report to illustrate that this renders the whole EAR unacceptable. One update which is actually included by C&A is to insert a new KTP 12, Predation by the European Fox, in addition to the 11 KTPs addressed in the 2007 report:

> *12 Predation by the European Fox*
>
> *The removal of vegetation and hence habitat for this species has the potential to increase habitat competition within retained areas and the Conservation Estates. As such this may contribute to an increase in the KTP "Predation by the European Fox". If appropriate management measures are employed by the land manager (currently Coal & Allied and DECCW in the long term) this KTP should not have a significant impact on the local wildlife.*

The EAR gives no explanation of why this significant KTP was not in the 2007 report, what new research has led to its inclusion in the current report, nor what other parts of the current report should be similarly updated and/or revised.

The EAR makes no comment on whether this outdated EAR gives the Minister sound information on which to decide if the report remains accurate this far down the track since C&A used it for a former proposal for a substantially different site. The EAR should be rejected.

2. Wildlife corridors are destroyed

***Ref 1.3 Surrounding Land Uses: Page 7 The site…forms part of the Wallarah Green Corridors which are areas of high conservation values joining key corridors through the Lower Hunter Region.* See Figure 2; Middle Camp Site.**

Ref 2.4 Project Need and Justification: Page 10 The dedication of conservation lands will contribute to the protection and amanagement of conservation corridors, in particular the Wallarah Peninsula Corridor which is a key focus of the LHRS and the companion Lower Hunter Regional Conservation Plan.

Ref. 6.3.1 Flora and Fauna: Page 37 .. the impact of the proposed development…would be minimal as large areas of potential habitat would be retained…with only small areas of habitat to be cleared within the development area.

Page 38 The Department concurs with the OEH's position that the dedication of the proposed conservation lands will adequately offset potential impacts on flora and fauna arising from the proposal. It would also contribute to the protection of a conservation corridor linking the Wallarah National Park and the Munmorah State Conservation Area.

This emphasis on the small area of clearing compared to the offset area of uncleared dedicated conservation lands obscures the reduction in value of the uncleared area. This is because of the elongated barrier created by the development on regenerating minesite land and newly cleared areas, blocking the corridors and inserting residential land use across the centre of the conservation lands.

Ref: Consideration; page 38:

…Appropriate environmental controls need to be put in place to manage the interface of the development and conservation areas, to ensure that any future development of the site does not impact on the conservation lands.

However, if the proponent is allowed to almost bisect the conservation lands, the question of what controls are 'appropriate' becomes problematic and requirements should be specified in great detail as to how fauna corridors can be maintained across such a barrier.

CHBPA's contention: The project's shape, as a swathe blocking half-way across the corridor, has never been considered by the proponent or IHAP as significant; they have only considered the quantum of area. They have also never considered the edge effects of the development as widening the apparent blockage of the wildlife corridor to almost meet the edge effects of the Pacific Highway and therefore, in combination, almost entirely blocking the corridor.

Ref Page 7: In the DG's AR, Figure 2 clearly shows the shape of the development, blocking east-west across the north-south wildlife corridors.

A serious issue with the Concept plan is the overemphasis on quantum of dedication of offset lands versus quality of dedication, particularly the shape of conservation land at the corridor west of Hamlet B. The word *corridor* is used many times in the EAR in stating how *vitally important* the area is for the ecology of the Wallarah Peninsula. In other words, the shape of the conservation lands offsets is the key value, supporting a contiguous wildlife area.

In contrast, the ecological assessment almost exclusively discusses only the quantum and the individual species impacts, not the shape of what is left after development, nor the impact of 220 houses on the adjacent conservation lands. The plan gives no criteria by which the maintenance of an effective corridor can be judged. The report is deficient in repeatedly asserting without evidence or rational argument, that because much of each foraging area, habitat, suitable soil etc., exists elsewhere in the conservation lands, the risks to wildlife can generally be dismissed. The reader is left uninformed about exactly how the vital contiguity will be preserved in the face of development, notwithstanding the reassuring tone of the ecological assessment.

It is plain when looking at the plan maps, that Hamlet B forms a wall east to west extending half way across the middle of the presumed Wallarah National Park corridor towards the Pacific Highway's western barrier. The Hamlet B development will change the shape of the adjacent national park and cut the essential wildlife corridor by more than half, from about 900m wide to under 300m wide and maybe less. In exclusively framing its argument on the basis of quantum not shape, the plan is quite deficient in not showing how the offsets will maintain the corridor which is recognised as the key value.

An example of this misrepresentation is the reference to clearing of vegetation as a KTP on page 102 of the EAR:

> *A number of threatened fauna potentially use these lands for foraging, including, Microchiropteran bats and particularly, nectivorous species such as flying-foxes, birds and arboreal mammals due to E. robusta within SSFCF EEC. As such removal of vegetation within the development estate has the potential to impact upon local populations of dependant species. Apart from hollow bearing trees, which are dealt with above, the development estate lands may represent foraging habitat for gliders (potentially Squirrel Glider), threatened Microchiropteran bats and Forest Owls. The loss of these relatively small areas of potential habitat for these threatened fauna species is not considered significant when compared with the much greater area of similar and*

greater quality habitat that will be secured as conservation lands within the current proposal.

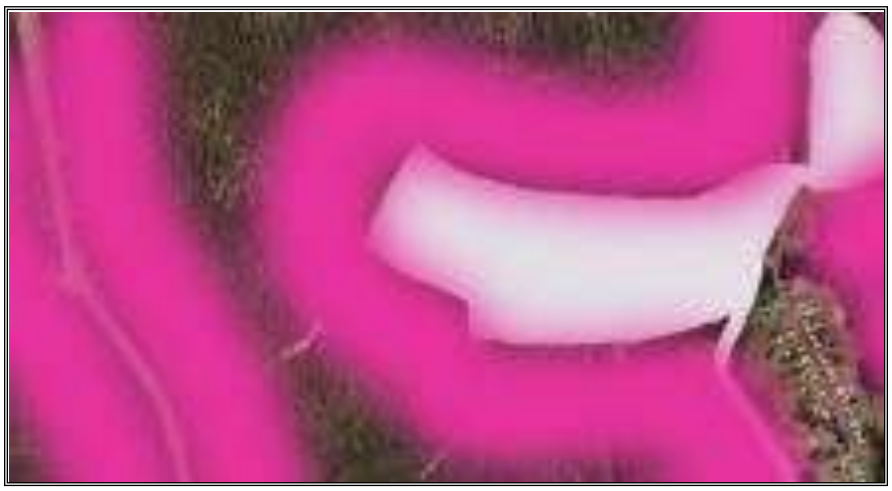
This is framing of the quantum of dedication as the single important factor is deficient in neglecting to mention that while the area of the habitat may be retained, access to it and within it will be split by the Hamlet B block of housing into what may be virtually separate compartments. The language of the EAR distracts from the real story. The EAR has repeated key phrases as if they were established fact, when they are mere assertions; eg in pages 5-104, more than 50 times the phrase …*[existing flora/fauna] will be retained/conserved /protected/ reserved/ secured in the conservation lands…* is used, as if that protection is a given, which ignores issues that mean protection cannot be guaranteed.

The particular edge effect issue is the zone of proximity of the conservation areas to roads, housing, weed concentrations, human incursions and animals introduced by residents. Consider just the road effects on the remaining corridor, which are not quantified in the EAR but this alternative opinion from Parks Victoria says they should be:

> *It is important to consider the contribution of roads to the increasing fragmentation of habitats, particularly for species that may react negatively to roads as physical, behavioural or sociological barriers. The associated possibility of genetic isolation of animal populations is also important.* (Ecological Effects of Roads, Parks Victoria 2004, p 25)
>
> *The road effect zone is defined by the distance to which each different ecological road impact extends outward (Forman 1999). These distances differ for each impact, ranging from a few metres to over a kilometre from... the road*
>
> *The road effects zone averages 600 m in width* (Ecological Effects of Roads, Parks Victoria 2004, p 47*.*

Note that the worst-case road effect of 600 m, if applied to the C&A proposal, would more than completely bisect the “corridor”. The EAR does not even mention this effect let alone provide a response to it.

Additional to the road effect is the impact of humans, night light, weeds and pets on the corridor so that the cumulative effect is potentially devastating to the Wallarah NP. The diagram below is superimposed on a Google Earth image of the development Hamlet B. Middle Camp village is shown in the bottom right corner. The Pacific Highway is the diagonal line on the left side. The white area and lines are Hamlets A and B and the roads. The pink area is indicative of the effects zones unquantified by C&A in this proposal:



The possible closing off of the wildlife corridor particularly at the western side of the development, is obvious. C&As concept plan does not address this possible complete closing-off of the Wallarah NP corridor by its development.

The one mention of supposed edge treatments, on page 95, is limited to retaining vegetation along ridges! The EAR however, mentions as a KTP the invasion by bitou and lantana on the edge of the development (p104) and recommends a weed management program, but no ongoing commitment to this is provided on page 112. On page 114 it says

> *…development at Catherine Hill Bay (Middle Camp) was undertaken through a reduction of the proposed development area via the removal of two development precincts following the aforementioned stakeholder consultation process, coupled with the commitment to mitigate unavoidable edge effects through best practice sensitive urban design.*

This repeats the assumption that the quantum, not the shape of the lands is important.

A specific component of the halo effect of the development is the impact of pets and feral animals, which is not meaningfully addressed in the EAR. The EAR dismisses this in one paragraph which indicates an abrogation of responsibility for the conservation lands:

> *The increase of residential development within the area has the potential to increase opportunities for the KTP "Predation by feral cats". This KTP is unlikely to significantly impact upon local wildlife provided responsible pet ownership is adopted.* (Ecological Assessment Report, Page 104)

C&A's bland reliance on *responsible pet ownership* and, in this new plan *a pet management strategy,* to protect the Wallarah National Park from impact flies in the face of research evidence that responsible pet ownership is problematic in Australian life.

Dogs and cats pose a threat to the conservation areas which is not addressed in the EA even though feral cats are a Key Threatening Process and the number of pets from 220 dwellings will be considerable. The size of this threat from the C&A development to the adjacent conservation areas and wildlife corridors can be estimated. The Population Survey Monitor of 1994 is the Australian Bureau of Statistics' most recent published assessment of numbers of pets in Australia (Australian Social Trends 4102.0 Special Feature, Household Pets). It is reasonable to use its data to predict the pet population of the C&A development.

In the C&A development with its likely population mix, an estimate of pets from the Australian figures for married couples with dependants, applied to the 220 households of the proposal:

Types of pets	**% of households**	**Likely No. in proposal, with this demographic**
Dogs	49.0	108
Cats	32.9	86

Residents walking up to 108 dogs daily in a confined residential area and its surrounding sensitive conservation land, is a very likely scenario. Residents dealing with the litters of large numbers of possibly fertile female cats add to the scenario. The quantum of this pet risk makes the notion of responsible pet management ironically important to the core of the concept plan.

One of the key impact risks is from pets gone feral through uncontrolled reproduction. The Population Monitor Survey has details of this risk:

> *In 1994, three-quarters of the domestic cats in Australia had been neutered, compared to just over half of the dogs…Unless cats are neutered they have great potential for rapid increase in population numbers. Cats can have three litters a year, with an average of five kittens per litter.*

> *The rapid reproduction of cats in urban areas contributes to the large numbers of stray cats that are put down by animal welfare agencies each year.*

From this data it is likely that the developments' estimated 86 cats would produce in just the first year, from the 25% of female cats not neutered, at least 2 litters of 5 kittens, or about 100 kittens in total. If only half of those survived and were retained in the settlement that would add more than half the cat population again, in the first year. The number of unwanted kittens dumped in the bushland around the development is likely to be significant.

The other key risk is from cats hunting native fauna. The Survey states:

> *The Australian Nature Conservation Agency estimates that the average domestic cat kills about 25 native animals a year. ... One way to stop cats from hunting is to stop them from roaming. In 1994, only 26% of domestic cats were confined both during the day and night, compared to 88% of dogs.*

With only 26% of cats on average confined, suppose 74% of the potential 86 cats were not confined at night and were roaming and thus killing native animals. On the ANCA estimates, they could kill up to 1500 native animals in the adjacent conservation areas and bush corridors in the first year, let alone in subsequent years and disregarding the litters of kittens gone feral.

These animals could make the supposed wildlife corridors past the developments into a slaughterhouse for native fauna.

Ref: 6.3.1 Flora and Flora; page 38:

.. The proponent has committed to the preparation of:

.. a pet management strategy to address potential impacts of pet ownership on flora and fauna.

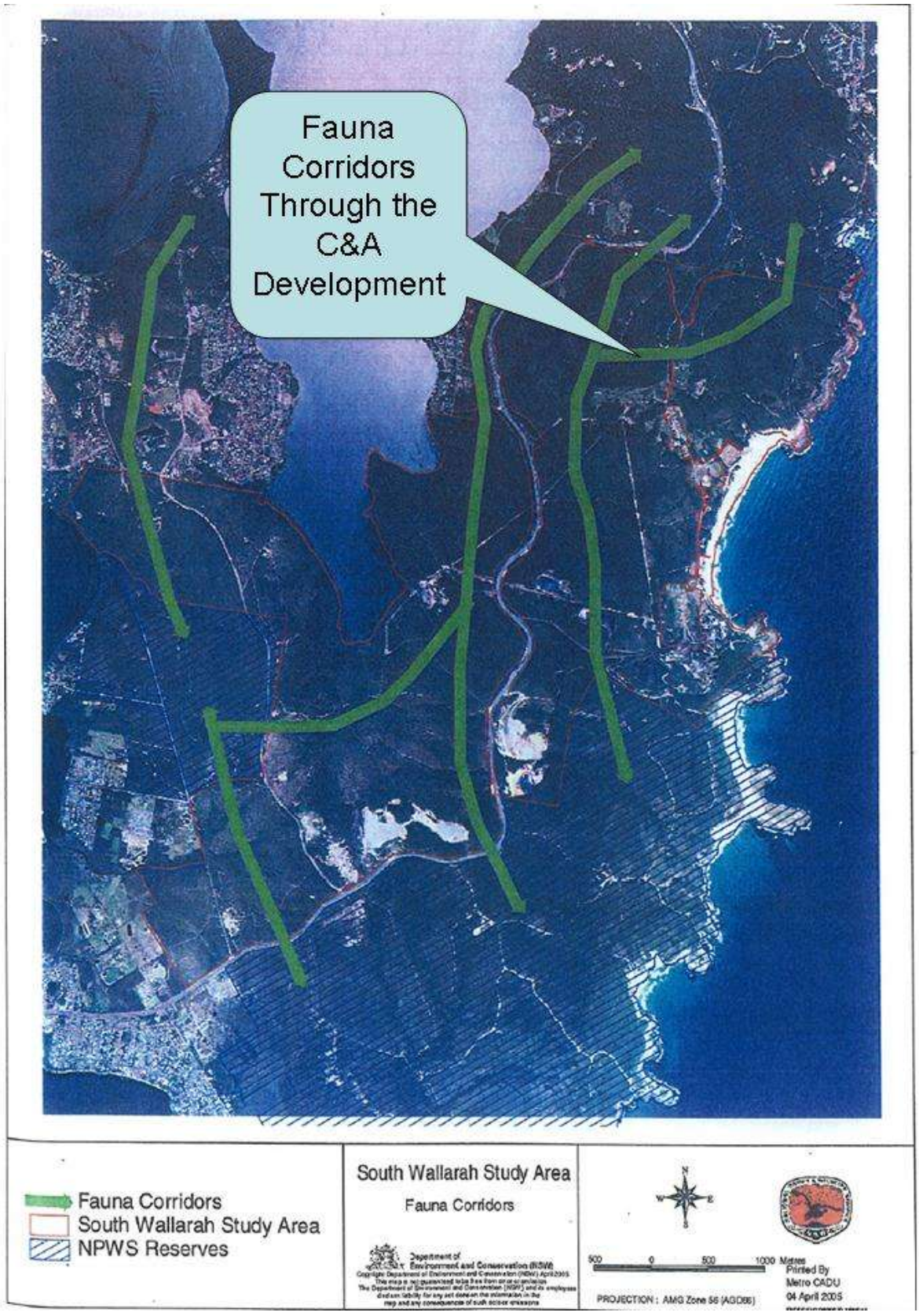
This is a vacuous statement which falls far short of the necessary cat ban in a sensitive ecological area, and obviously only a dramatic reduction in the number of dwellings will limit the impact of dogs, children, mountain bikes, dirt bikes, etc in the close by conservation and National Park areas.

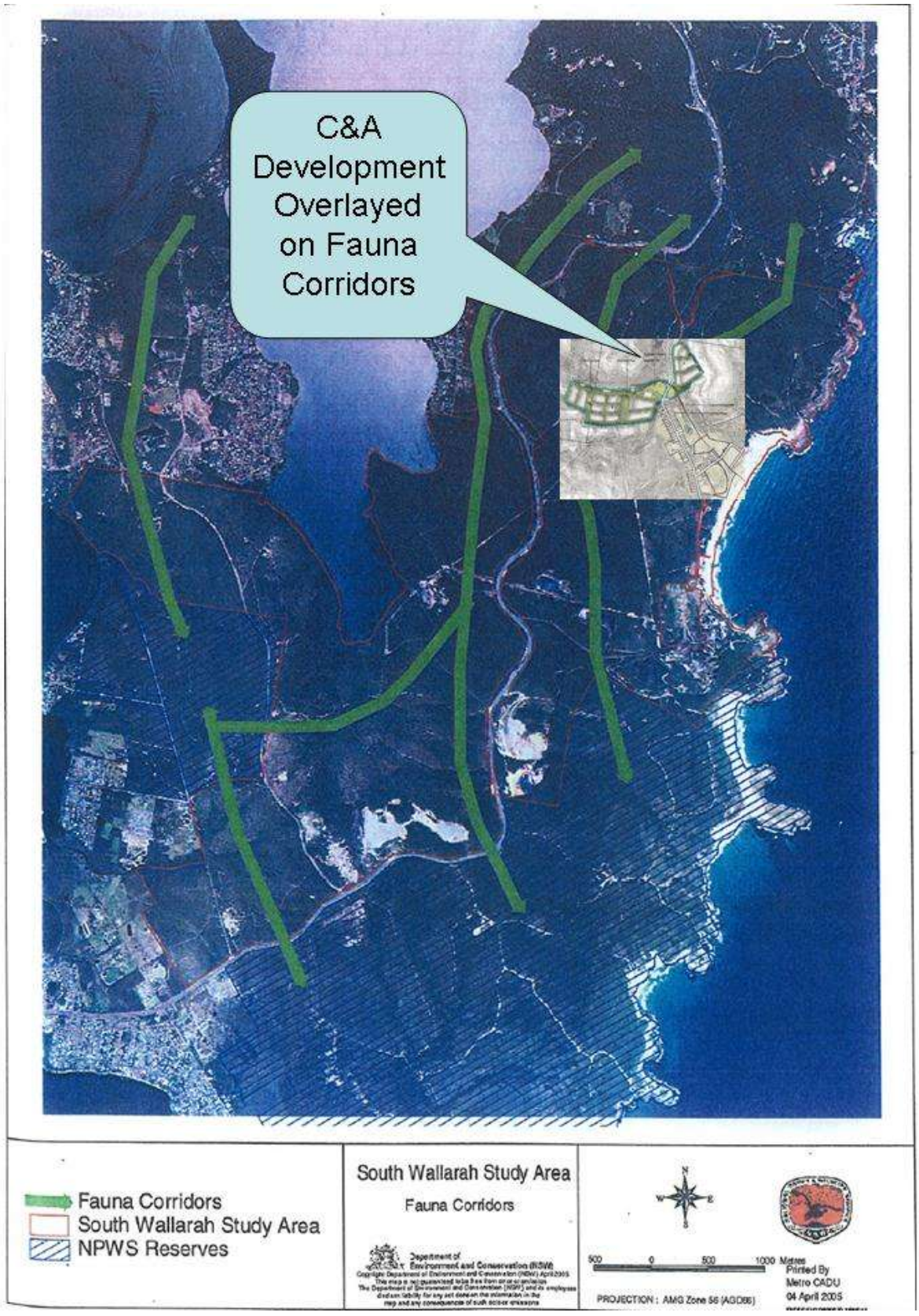
***Ref 3.6 Page 14 Intergenerational Equity: States that the proposal will secure regionall significant wildlife corridors by the dedication of a quantum of land* – without mentioning the fact that the wildlife corridors will be almost blocked by the shape of the development.**

***Conservation of Biological Diversity and Ecological Integrity:* This states without evidence that the dedication of conservation land will protect native vegetation and development will improve biodiversity values and … long-term viability. It does not mention that the blockage of the corridor and the edge effects of the residential development are highly likely to impact very negatively on both biological diversity and ecological integrity.**

Ref 6.1.1 Page 23 Proposed Land Uses: .The Department…considers that the extent of the proposed development is appropriate..located predominantly within areas which have previously been disturbed…

This also does not consider the shape of the development as a blockage to the corridors, nor that edge effects will impact on both flora and fauna and have not been quantified nor has a management plan for these been mentioned by the proponent.


Fauna Corridors Through the C&A Development
Fauna Corridors
South Wallarah Study Area
NPWS Reserves
South Wallarah Study Area
Fauna Corridors
Department of Environment and Conservation (NSW)
PROJECTION : AMG Zone 56 (AGD66)
Printed By
Metro CADU
04 April 2005


C&A Development Overlayed on Fauna Corridors
Fauna Corridors
South Wallarah Study Area
NPWS Reserves
South Wallarah Study Area
Fauna Corridors
Department of Environment and Conservation (NSW)
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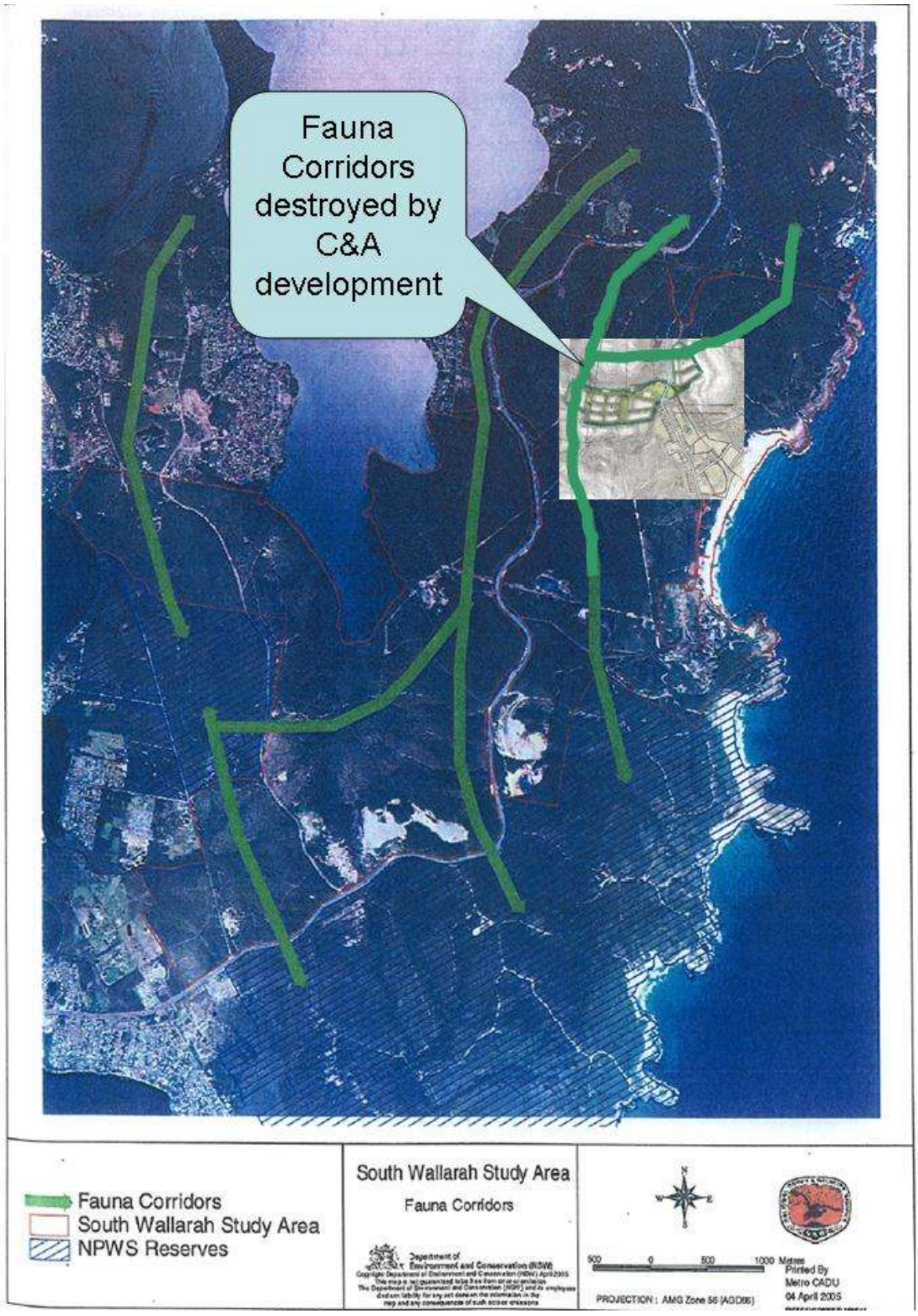

Fauna Corridors destroyed by C&A development
Fauna Corridors
South Wallarah Study Area
NPWS Reserves
South Wallarah Study Area
Fauna Corridors
Department of Environment and Conservation (NSW)
500 0 500 1000 Metres
PROJECTION : AMG Zone 56 (AGD66)
Printed By
Metro CADU
04 April 2005

1. The Creeks and Wetlands are not protected.

Ref 6.3.2 Wetlands; Page 39

These wetlands do not occur within the same catchment of the site and, as such, the proposal would have minimal impact on these wetlands…

It is considered that the ongoing impacts on the wetlands would be mitigated through the implementation of the proposed water sensitive urban design strategy… a water quality and hydrological monitoring program… reducing road width… realigning the road… a proposed heritage walk.

We urge you take a second look at these wetland and creek areas and their distinct ecological systems.

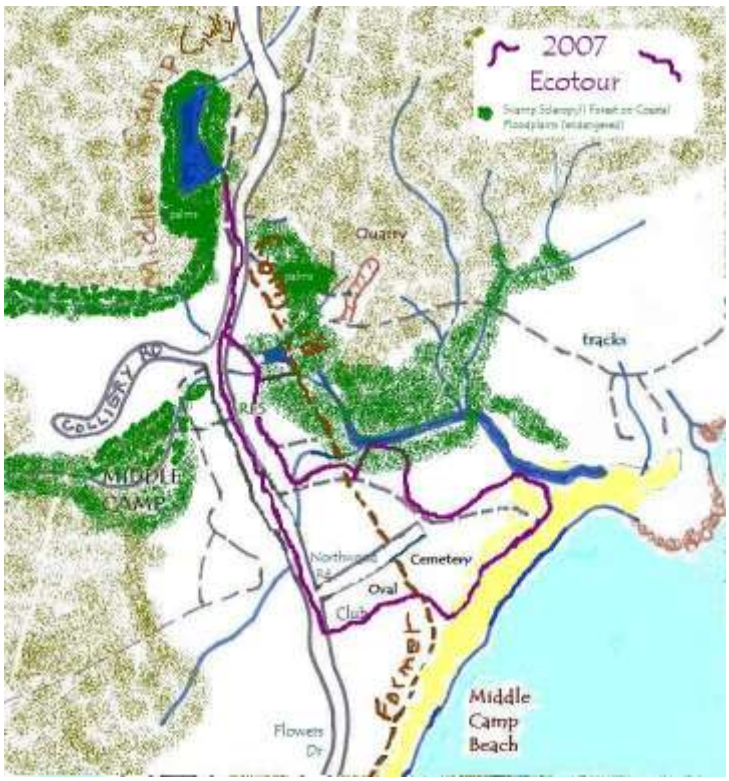
Hamlets A and B are in close proximity to 3 cabbage tree palm groves south and east of the dam, which no doubt were previously one large wetland area. These vestiges must be carefully preserved.

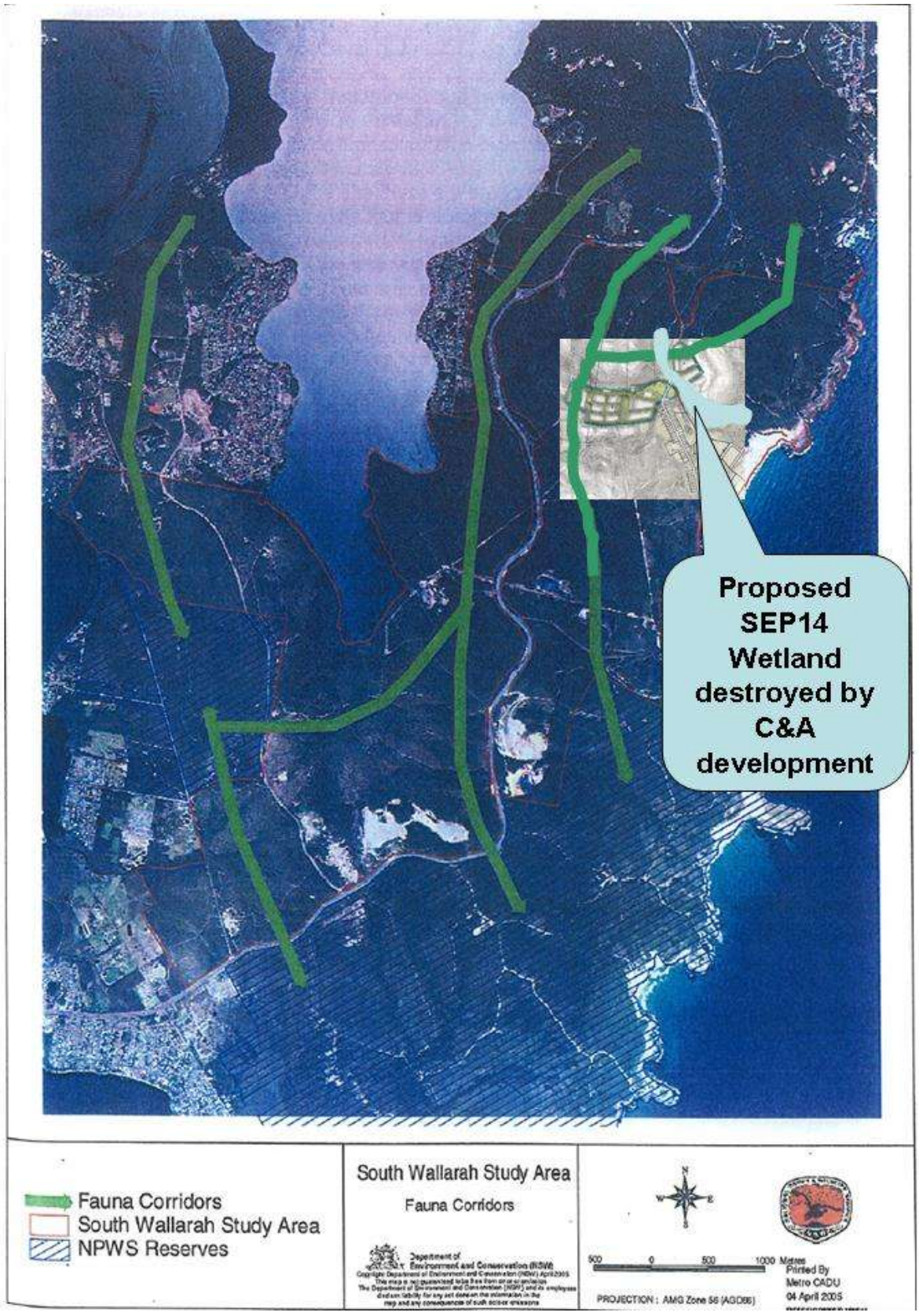
Similarly, the creek west and parallel to Flowers Dr, and east of Flowers Dr flowing into the beach, have their own ecosystems with endangered flora and fauna.

The edge effects detailed above will be concentrated in such attractive areas. For this reason alone, no additional housing should be located in the areas marked Hamlet A and Hamlet B.

Do the proposed measures include any external evaluation, monitoring or consequences?

There is no plausible or ethical reason to approve this development if the creeks and wetlands are valued.




Proposed SEP14 Wetland destroyed by C&A development
Fauna Corridors
South Wallarah Study Area
NPWS Reserves
South Wallarah Study Area
Fauna Corridors
Department of Environment and Conservation (NSW)
PROJECTION : AMG Zone 56 (AGD66)
Printed By Metro CADU 04 April 2005

Department of the Environment and Conservation NSW Position (2005)

"It is the position of the Department of the Environment and Conservation NSW that the South Wallarah Study Area is of extremely high conservation value and that development opportunities across the site are limited due to the potential for incremental habitat loss and fragmentation. While some disturbed areas may be suitable for development without severe risk to the integrity of the remainder of the site, others will need to be rehabilitated to ensure the long term viability of the corridor network, particularly the north south linkage on the eastern side of the highway.

Limited development opportunities are provided for within the current land zonings in the Wyong and Lake Macquarie Local Environment Plans which cover the area, and the DEC supports the approach taken by both Councils to recognise the conservation significance of this area in their planning instruments." (P28, Department of the Environment and Conservation NSW Conservation Assessment of Lands - South Wallarah Peninsula)

Middle Camp Wetlands investigated for addition to State Environmental Planning Policy No 14.

For the last 9 years LMCC has been trying to have Middle Camp Wetlands added to SEPP no.14. This Wetland has a rating of 2 which puts it in the 2nd highest category Lake Macquarie.

Addendum to Lake Macquarie Wetlands Management Study for Two Additional Wetlands: Middle Camp, Catherine Hill Bay and Redhead Wet Heath FINAL: 26 June 2001

The following Table 2 updates Table 3 included in Section 5 Results from SWC (1998). Based on the assessment method detailed by SWC (1998), those wetlands with a higher evaluation total score have been assessed as having a higher conservation ranking. Note that the two additional wetlands have been assessed as a priority ranking of 2 for Middle Camp and 16 for Redhead Wet Heath.